BEREZKIN, V.G.; MYSAK, A.Ye.; POLAK, L.S.

Gas chromatographic analysis of mixtures of organic compounds
with a colective determination of alcohols. Zav. lab. 31 no.3:
282-284 '65.   (MIRA 18:12)

1. Institut neftekhimicheskogo sinteza AN SSSR.

ALISHOYEV, V.R.; BEREZKIN, V.G.; MEL'NIKOVA, Yu.V.

Effect of phase transitions in the stationary phase on the
chromatographic characteristics of the eluates. Zhur. fiz.
khim. 39 no. 1:200-202 Ja '65   (MIRA 19:1)

1. Institut neftekhimicheskogo sinteza AN SSSR. Submitted
January 13, 1964.

L 29538-66   EWT(m)/EWP( )/T   IJP(c)   WW/GG/RM

ACC NR: AP6007777   SOURCE CODE: UR/0195/66/007/001/0187/0187

AUTHOR: Berezkin, V. G.; Kolbanovskiy, Yu. A.; Kyazimov, E. A.

ORG: Institute of Petrochemical Synthesis im. A. V. Topchiyev, AN SSSR (Institut neftekhimicheskogo sinteza AN SSSR)

TITLE: Kinetics of radiation polymerization of acrylonitrile from the gas phase on a mineral substrate

SOURCE: Kinetika i kataliz, v. 7, no. 1, 1966, 187

TOPIC TAGS: acrylonitrile, radiation polymerization, absorption

ABSTRACT: The kinetics of graft polymerization of acrylonitrile initiated with Co^{60} gamma radiation was studied. The reaction was conducted with a view to modifying the properties of INZ-600 brick which is widely used as a carrier in gas-liquid chromatography. A powdered form of this material in a glass ampoule was subjected to heat treatment at 300° and a pressure of 10^{-2} mm Hg for 3-4 hr; a second ampoule containing the degassed monomer was connected to the first ampoule so that during the irradiation the powder was in acrylonitrile vapor (the liquid acrylonitrile was

Card 1/2   UDC: 541.124 : 542.952.6 + 541.15

L 29538-66
ACC NR: AP6007777 O

shielded from the radiation with lead). The weight of polymer formed was measured as a function of irradiation time. The kinetics of the process are adequately described by the Roginskiy-Zel'dovich equation for adsorption on an inhomogeneous surface
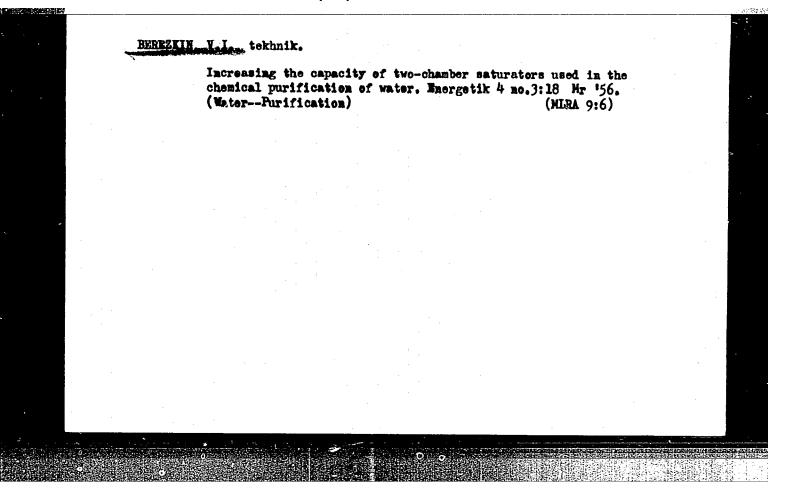
$$\frac{dq}{dt} = ae^{-bq} \quad \text{или} \quad q = \frac{1}{b}[\ln(t+t_0) - \ln t_0], \qquad (1)$$

where

$$t_0 = \frac{1}{ab}.$$

From the data obtained it is concluded that the surface which actually takes part in the grafting process is inhomogeneous. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 07/ SUBM DATE: 26May65/ ORIG REF: 000/ OTH REF: 001

Card 2/2

BEREZKIN, V.I., tekhnik.

Increasing the capacity of two-chamber saturators used in the chemical purification of water. Energetik 4 no.3:18 Mr '56.
(Water--Purification)   (MLRA 9:6)

BEREZKIN, V.

USSR/Vulcanizing Equipment   May 1947
        Tires - Repairing

"Portable Vulcanizing Equipment," V. Berezkin,
Engr, 1 p

"Avtomobil'" Vol XXV, No 5

Demand for vulcanizing equipment not being met.
Requires use of portable equipment being made by
the "Krasnyy Oktyabr'" factory of the GARO com-
bine. Diagram, photograph and description of
operation. Weighs 133 kg and can be handled by
two men.

                                        12T23

BEREZKIN, V., inzhener.

The new GARO battery charging switch. Avtomobil' 25 no.7:11 Jl '47.
(MLRA 6:9)
(Storage batteries)

USSR/Engineering   Aug 48
    Bearings
    Casting, Centrifugal

"Equipment for Centrifugal Casting of Bearings,"
V. Berezkin, Engr, 1 p

"Avtomobil'" No 8

Describes machine with diagrams. Lists principal
dimensions and performance figures.

16/49T35

BEREZKIN, V.

USSR/Engineering
    Automobile Industry
    Piston Cylinders

"Industrial Inventors," V. Berezkin, Engr, $1\frac{1}{2}$ pp

"Avtomobil'" No 9

Describes: (1) machine for boring cylinders of automobile cylinder blocks; (2) machine for boring cylinders of new model cars (GAZ-51), photograph; (3) appliances for boring crank and connecting rod bearings, photograph and sketch. All tools were introduced by GARO (Garage and Auto Repair Equipment Trust).

16/49T41

POSTEL'NIKOV, S.S.; BEREZKIN, V.I.; VINOGRADOV, A., redaktor; ZHURAV-
LEV, A., tekhnicheskiy redaktor.

[Automobile racing] Avtomobil'nye sorevnovaniia. Moskva, Izd-vo
DOSAAF, 1952. 108 p. [Microfilm]   (MLRA 7:11)
        (Automobile racing)

BEREZKIN, V.

Motorcycle Racing

On a motorcycle. Mol, kolkh. no. 2, 1952

Monthly List of Russian Accessions, Library of Congress, June 1952.   Unclassified.

ISKANIN, V.I.

Sorevnovaniia na masterstvo vozhdeniia avtomobilia (Competition for mastery in automobile driving). Moskva, "Fizkul'tura i sport," 1953. 63 p.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

BEREZKIN, V., inzhener.

Modernized and new garage equipment. Avt.transp. 33 no.3:36
Mr '55.   (MIRA 8:5)
          (Garages)

BEREZKIN, Vasiliy Ivanovich; POSTEL'NIKOV, Sergey Sergeyevich; PAPMEL',
S.V., redaktor; MANINA, K.P., tekhnicheskiy redaktor.

[Competitions in expert automobile driving; under city conditions
and for skill in figure driving] Sorevnovaniia na masterstve vozh-
deniia avtomobilia; v gorodskikh usloviiakh i na masterstve figur-
nogo vozhdeniia. Izd. 2-oe, ispr. i dop. Moskva, Gos. izd-vo "Fiz-
kul'tura i sport", 1956. 87 p.   (MIRA 9:6)
                    (Automobile drivers)

BEREZKIN, V., inzhener.

Mobile hydraulic console lift. Avt.transp.34 no.2:22 F '56.
(Hoisting machinery)   (MIRA 9:7)

BEREZKIN, V., inzhener; PLITMAN, I., inzhener.

The operating characteristics of the TA-49 taximeter.
Avt. transp. 34 no.7:20-21 Jl '56.   (MLRA 9:10)

(Taxicabs).

BEREZKIN, V., inzhener; ZHERNOVKOV,A., inzhener.

Compressometer. Za rul. 14 no.5:18 Ag '56.
(Automobiles--Engines--Testing)   (MIRA 10:1)

BEREZKIN, V.; ZHERNOVKOV, A.

Modernization of the ignition control instruments. Avt.
transp. 34 no.12:12-13 D '56.   (MLRA 10:2)

(Automobiles--Ignition)

BEREZKIN, Vasiliy Ivanovich; POSTEL'NIKOV, Sergey Sergeyevich; YEFREMOVA, Ye.V., redaktor; ANDRIANOV, B.I., tekhnicheskiy redaktor

[Automobile races] Avtomobil'nye sorevnovaniia. Izd. 2-oe, ispr. i dop. Moskva, Izd-vo DOSAAF, 1957. 127 p.   (MLRA 10:9)
            (Automobile racing)

BEREZKIN, V.; PLOTNIKOV, Yu.

Driving competitions of young people. Za rul. 15 no.2:
8 F '57. (MLRA 10:5)

1. Direktor Moskovskogo gorodskogo kluba yunykh avtomobilistov
(for Plotnikov).
(Juvenile automobile drivers--Competitions)

BEREZKIN, V., insh.

The 426-type hydraulic jack used in garages.   Avt.transp. 35
no.2:22-23 F '57.   (MIRA 10:12)
                    (Hydraulic jacks)

BEREZKIN, V.

BEREZKIN, V., sud'ya vsesoyuznoy kategorii.

Cross-country race championship of the U.S.S.R. Avt. transp. 35
no.12:26 D '57.   (MIRA 11:1)
                (Rostov-on-Don--Automobile racing)

BEREZKIN, Vasiliy Ivanovich; KRASNOV, Konstantin Alekseyevich; MARTENS, S.L., red.; MAL'KOVA, N.V., tekhn.red.

[Equipment for garages and stations servicing automobiles] Oborudovanie dlia garazhei i stantsii obsluzhivaniia avtomobilei. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1959. 273 p.   (MIRA 12:5)
        (Garages--Equipment and supplies)
        (Service stations--Equipment and supplies)

BEREZKIN, V., sud'ya vsesoyuznoy kategorii

Unification of requirements. Za rul. 17 no.8:26 Ag '59.
(MIRA 12:12)

(Automobile racing)

BEREZKIN, Vasiliy Ivanovich; KRASNOV, Konstantin Alekseyevich;
YABLOKOV, V.I., red.

[Equipment for garages and service stations] Oborudovanie
dlia garazhei i stantsii obsluzhivaniia avtomobilei. Izd.2.,
perer. i dop. Moskva, Transport, 1964. 462 p.
(MIRA 17:7)

BEREZKIN, V. M., Candidate of Tech Sci (diss) -- "A new method of computing the effect of topography on the indications of gravimeters". Moscow, 1959. 15 pp (Min Higher Educ USSR, Moscow Geological-Prospecting Inst im S. Ordzhonikidze), 110 copies (KL, No 21, 1959, 114)

BEREZKIN, V.M.

Calculating corrections for surface configuration of the terrain
to the measured values of gravity acceleration. Trudy MGRI
36:112-119 '59.   (MIRA 15:5)
                        (Gravity prospecting)

BEREZKIN, V.M.

Calculating the effect of relief on gravimeter readings according to relative altitudes at given points. Izv. vys. ucheb. zav.; geol. i razved. 3 no. 10:102-109 O '60.   (MIRA 13:12)

1. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze.
        (Gravimeter (Geophysical instrument))

BEREZKIN, V.M.

Nomograms showing the effect of relief on gravimeter readings based
on relative altitudes at characteristic points. Izv. vys. ucheb.
zav.; geol. i razv. no.11:116-122 N '60.   (MIRA 14:2)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.
        (Gravimeter (Geophysical instrument))

BEREZKIN, V.M.

Radius for calculating the effect of relief in gravity prospecting.
Razved. i prom. geofiz.   no.39:54-60 '61.   (MIRA 15:3)
(Gravity prospecting)

BEREZKIN, V.M.; BUDANOV, V.G.; GERENBLAT, N.M.; YEVDOKIMOV, Yu.S.

High-precision gravimetric survey over the petroleum and gas
bearing structures of the northern Caucasus. Razved. i prom.
geofiz. no.50:60-66 '63.   (MIRA 18:3)

BEREZKIN, V.M.

Practice in determining the density of an intermediate layer using
gravimetric data. Geofiz.razv. no.13:81-86 '63.   (MIRA 17:4)

BEREZKIN, V.M.

Relationship between the density of rocks and the propagation velocity of the elastic waves in them. Razved. i prom. geofiz. no.49:86-87 '63

(MIRA 17:7)

BERTZKIN, V.M.; NEFEDOVA, N.Yu.

Determining the density of the intermediate layer using the methods of information theory and mathematical statistics.
Razved. geofiz. no.5:39-46 '65.

(MIRA 18:9)

The trip of "LITKE" in 1934. The Maritime
Collection, No. 2, 1934.

1.   BEREZIN, VS. A.

2.   USSR (600)

4.   Physics and Mathematics

7.   Dynamics of the Sea, Va A. Berezkin
     (Leningrad, Hydromet Press, 1947). Reviewed by V.V. Shuleykin, Sov.
     Kniga, No. 2, 1949.

9.   ██ Report U-3081, 16 Jan. 1953, Unclassified.

L 29933-65   EPF(c)/EPA(s)-2/EWP(j)/EWT(m)/EWP(b)/EWP(t)   Pc-4/Pr-4/Pt-10/
Pad   IJP(c)/RPL RM/JD/HW
ACCESSION NR: AP5004602   S/0020/65/160/002/0405/0408

AUTHOR: Terent'yev, A.P. (Corresponding member AN SSSR); Vozzhennikov, V. M.;
Kolninov, O. V.; Zvonkova, Z. V.; Rukhadze, Ye. G.; Glushkova, V. P.; Berezkin,
V. V.

TITLE: Semiconducting and optical properties of copper, nickel, zinc, and cadmium
dithiocarbamates

SOURCE: AN SSSR. Doklady, v. 160, no. 2, 1965, 405-408

TOPIC TAGS: copper dithiocarbamate, nickel dithiocarbamate, zinc dithiocarbamate,
cadmium dithiocarbamate, dithiocarbamate semiconducting property, dithiocarbamate
optical property, organic semiconductor, chelate electrical property, polychelate con-
ductivity, activation energy

ABSTRACT: This paper is part of a study of a series of chelates and polychelates aimed
at determining the dependence of their electrical properties on their atomic structure and
nature of their chemical bonds: this in turn is vital in the synthesis of organic semicon-
ductors. In this work, it was found that the electrical conductivity depends on the concen-
tration of the metal in the sample more than on the nature of the metal, as indicated by
the highly conductive copper compounds. All the chelates and polychelates studied were
substances with high electrical resistance. On the basis of their absorption spectra,

Card 1/2

L 29933-65
ACCESSION NR: AP5004602

several types of electronic transitions were established, and the thermal activation energy E_{therm} was compared with the optical activation energy E_{opt}. It was concluded that the semiconducting parameters are determined primarily by the nature of the metal - ligand chemical bond, and not by the crystal structure or superstructure. Orig. art. has: 3 figures, 1 table and 2 formulas.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical institute); Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow state university)

SUBMITTED: 04Aug64   ENCL: 00   SUB CODE: 00, EM

NO REF SOV: 004   OTHER: 000

Card 2/2

BEREZKIN, YE. N.

BEREZKIN, YE. N. -"Certain Problems of Stability in the Theory of Automatic Regulation."
Moscow Order of Lenin and Order of Labor Red Banner State U imeni M. V. Lomonosov,
Moscow, 1955 (Dissertations For the Degree of Candidate of Physicomathematical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

AUTHOR: Berezkin, Ye. N.

TITLE: Some Problems of Stability of Motion
   (Nekotoryye voprosy ustoychivosti dvizheniya)

ABSTRACT: Various cases are considered of defining the functions $f(x)$, $\varphi(x)$, $F(x)$, etc., in the differential equations of a perturbed motion $dx/dt = y(1 + f(x))$; $dy/dt = \varphi(x) + yF(x) + y^2 \Phi(x) + \ldots$ assuming that in any of the above cases the indicial equation in the first approximation

$$\begin{bmatrix} -x & 1 \\ 0 & -x \end{bmatrix} = x^2 = 0$$

has a double zero root. Using in some cases Chetayev's instability theorem or in other cases Lyapunov's functions, the author solves the stability problem of the motions in question in Lyapunov's sense. Bibliography: 8 items.

                                                            M.A.A.

Card 1/1

BEREZKIN, Ye.N..(Moskva)

Stability of undisturbed motion of a mechanical system.
Prikl. mat. i mekh. 23 no.3:606-610 My-Je '59.

(MIRA 12:5)

(Motion)

BEREZKIN, Yu., starshiy inzh.

In Lenin's city. Izobr.i rats. no.2:40 F '61.   (MIRA 14:2)

1. Byuro sodeystviya ratsionalizatsii i izobretatel'stvu, g. Leningrad.
        (Leningrad—Railroads—Technological innovations)

BEREZKIN, Yu. I., inzh. (stantsiya Vyborg, Oktyabr'skoy dorogi)

Improved switch detector bar. Put' i put.khoz. 5 no.2:35
F '61.   (MIRA 14:3)
          (Railroads—Switches)

BEREZKIN, Yu.I., insh.

Device for installing brush holders. Elek. i tepl. tiaga 4 no.10:
30 0 '60.   (MIRA 13:10)

1. Motorvagonnoye depo Leningrad-Finlyandskiy.
        (Electric railway motors)   (Brushes, Electric)

ZABELLO, Z.I.; PEKKER, M.Z.; BEREZKIN, Yu.I., red.; KISLYAKOVA,
M.N., tekhn. red.

[Expediency in the plant kingdom] TSelesoobraznost' v
rastitel'nom mire. Minsk, Izd-vo M-va vysshego, srednego
spetsial'nogo i professional'nogo obrazovaniia BSSR, 1962.
101 p.   (MIRA 16:11)
         (Botany—Philosophy)

ALEKSEYEV,Valentin Nikolayevich ; BEREZKIN, Yu.I., red.; BELEN'KAYA, I.Ye.,
        tekhn. red.

[Accumulation of capital and the impoverishment of the proletariat,
an account of Marxist-Leninist theory] Nakoplenie kapitala i obni-
shchanie proletariata; ocherk marksistsko-leninskoi teorii. Minsk,
Izd-vo Belgosuniversiteta im. V.I.Lenina, 1960. 241 p.
                                                (MIRA 14:12)
                    (Economics)

KUDRYAVITSKIY, Isaak Borisovich; IGNATENKO, Illarion Mefodiyevich;
    PROKHOROV, Viktor Vasil'yevich; BEREZKIN, Yu.I., red.;
    SOSINOVICH, A.I., tekhn. red.

    [The struggle of workers in Gomel' Government for the re-
    construction of the national ecopomy in 1921-1925] Trudiashchie-
    sia Gomel'skoi gubernii v bor'be za vosstanovlenie narodnogo kho-
    ziaistva, 1921-1925 gg. Pod red. I.Ignatenko. Minsk, Izd-vo
    Belgosuniversiteta im. V.I.Lenina, 1961. 77 p.   (MIRA 15:1)
                (Gomel' Government--Reconstruction)

YANCHENKO, Stepan Yefimovich; BEREZKIN, Yu.I., red.; BELEN'KAYA, I.ye.,
tekhn. red.

[Capital exports; textbook] Vyvoz kapitala; uchebnoe posobie.
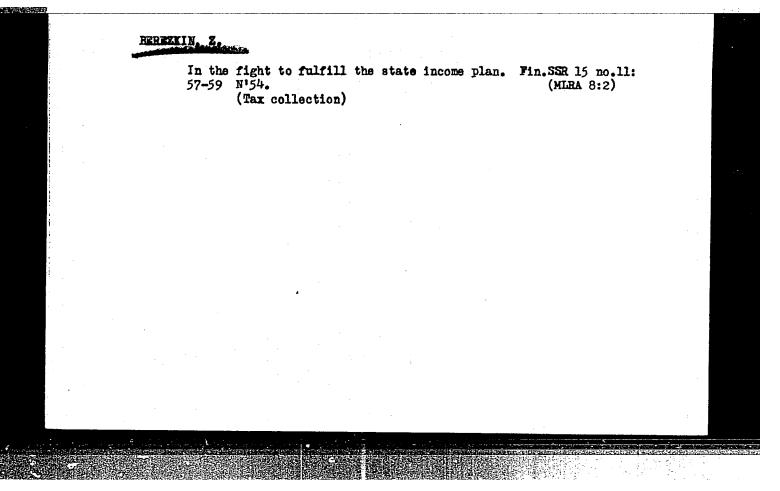Minsk, Izd-vo Belgosuniv. im. V.I.Lenina, 1961. 49 p.
(MIRA 15:1)

(Investments, Foreign)

TOMASHEVICH, V.A., red.; BAZYLEV, T.A., red.; GRISHANOVICH, P.U.,
    red.; ROGOVSKIY, I.T., red.; BEREZKIN, Yu.I., red.;
    SAVITSKIY, F.I., red.; BELEN'KAYA, I.Ye., tekhn. red.

[Collected articles on economic problems]Sbornik po ekonomi-
cheskim voprosam. Minsk, Izd-vo M-va vysshego, srednego spe-
tsial'nogo i professional'nogo obrazovaniia BSSR. 1961. 163 p.
                                            (MIRA 16:2)
            (White Russia—Economics)

BEREZKIN, Z.

In the fight to fulfill the state income plan. Fin.SSR 15 no.11:
57-59 N'54.   (MLRA 8:2)
        (Tax collection)

L 23059-66   EWT(1)/ETC(f)/EPF(n)-2/EWG(m)   WW

ACC NR: AP6001997   SOURCE CODE: UR/0170/65/009/006/0735/0740

AUTHOR: Berezkina, A. I.   61

ORG: Technological Institute of the Refrigeration Industry, Leningrad (Tekhnologicheskiy institut kholodil'noy promyshlennosti)

TITLE: The temperature similitude of the heat exchange processes

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 6, 1965, 735-740

TOPIC TAGS: heat exchanger, heat transfer, boundary layer, ~~heat transfer~~, temperature simulation

ABSTRACT: The author presents a relationship which makes possible a quantitative and a qualitative characterization of the temperature and humidity condition of the medium in heat- and mass-transfer processes on the boundary of the boundary layer. The method of derivation is given in detail. The following equation may be used for the calculation of heat- and mass-transfer processes in the 20—40C temperature range (at atmospheric pressure):

$$C_k = \frac{\Delta x}{\lg(x_f/x_w)} = 1.14 \cdot 10^{10} \frac{Ak^2}{g l^3 r}\left(\frac{l_0}{l}\right)^2 .$$

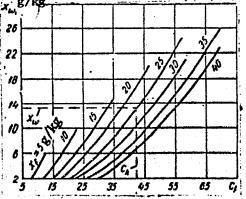Card 1/2   UDC 536.24 + 532.526
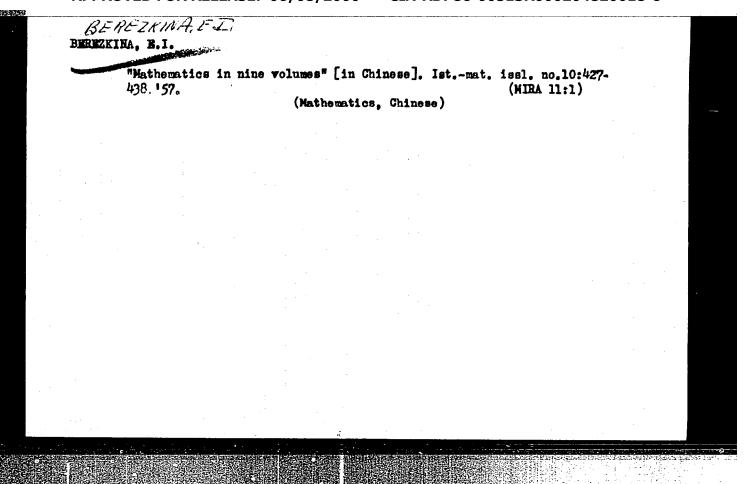
L 23059-66

ACC NR: AP6001997

where C_k is the quantity characterizing the drying capacity of the heat exchanger, depending on the physical properties of the medium (diffusivity k, latent heat of condensation r, thermal expansibility β, and specific gravity γ. The last two quantities are not taken into account in the temperature and pressure range investigated). The equation presented is solved by means of the graph $x_w = f(x_f, C_k)$ (Fig. 1).
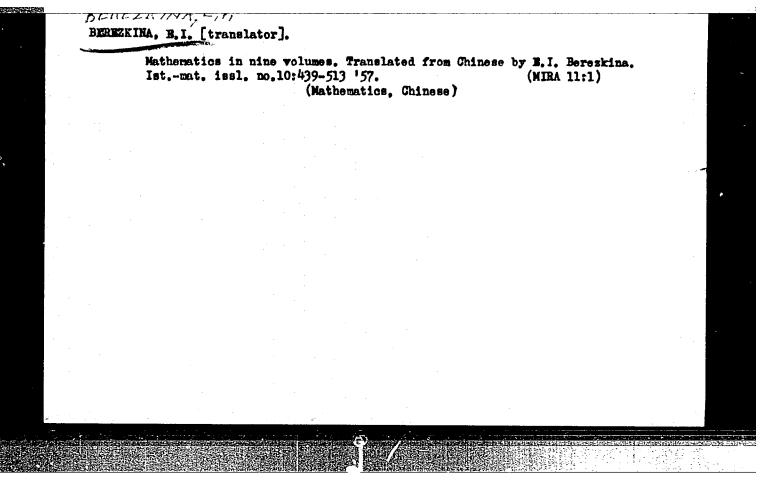
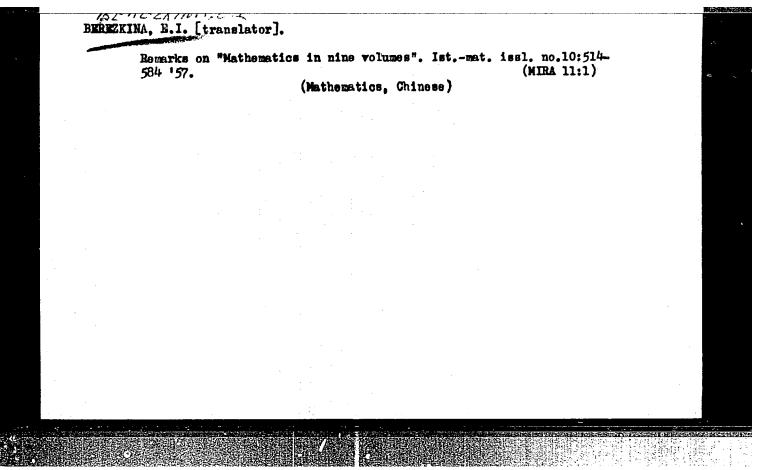Fig. 1.   The relationship $x_w = f(x_f, C_k)$ for

heat exchangers.

Orig. art. has: 4 figures and 10 formulas.

SUB CODE: 13,20 / SUBM DATE: 06Apr65 / ORIG REF: 007 / OTH REF: 001
Card   2/2

BEREZKINA, E.I.

BEREZKINA, E.I.

"Mathematics in nine volumes" [in Chinese]. Ist.-mat. issl. no.10:427-438. '57.   (MIRA 11:1)

(Mathematics, Chinese)

BEREZKINA, B.I. [translator].

Mathematics in nine volumes. Translated from Chinese by B.I. Berezkina.
Ist.-mat. issl. no.10:439-513 '57.   (MIRA 11:1)
                    (Mathematics, Chinese)

BEREZKINA, E.I. [translator].

Remarks on "Mathematics in nine volumes". Ist.-mat. issl. no.10:514-
584 '57.   (MIRA 11:1)
                        (Mathematics, Chinese)

AUTHOR: Vyatkin, R. V., Candidate of History.   30-12-15/45

TITLE: The Conference of Sinologists at Marburg
               (Na konferentsii sinologov v Marburge).

PERIODICAL: Vestnik An SSSR, 1957, Vol. 27, Nr 12, pp. 69-70 (USSR)

ABSTRACT: From September 5 to September 12 the 10th international con-
               ference of young sinologists took place in the old university
               town of Marburg (German Federal Republic). Such meetings of
               sinologists from various countries, which are now an important
               event in the life of science, have been held regularly since
               1948. For each of these conferences, which have the character
               of a symposium, certain questions are usually prepared for
               discussion. The program of operation made it possible, however,
               to deliver lectures also an other subjects. This conference was
               attended by 160 delegates from 16 countries. The Soviet dele-
               gation consisted of 4 collaborators of the Sinological Institute
               of the AN USSR. The preceding subject dealt with was "Tradition
               and Innovations in the Chinese Civilization and Literature".
               All in all 20 lectures were delivered, 8 of which dealt with
               historical subjects: The lecture delivered by the German hist-
               orian G. Franke on Tsya-Sy-dao, a politician of the Sun epoch,
Card 1/3   the lectures delivered by the Soviet delegate V. N. Nikiforov

The Conference of Sinologists at Marburg.

"On the problem of the founding of the Chinese Nation", and
R. V. Vyatkin "On the part played by Sym Tsyan' in the develop-
ment of historical knowledge", etc. Several lectures dealt with
problems of literature and art. The following are worth ment-
ioning: the problematic and interesting lecture delivered by
J. Prusek (CSR) "On the Part Played by Traditions in Chinese
Literature", those by S. D. Markova "On the Tradition and Inno-
vations in the Early Poetry of Go MoZho", by Pan' chzhun-guy
(Singapore) on the novel "Khunloumyn", and by E. Burkhardt
(Switzerland) on the famous Chinese painter Tsi Bay-shi. The
analysis of the ancient Chinese mathematical treatise
"Tszyuchzhan suan'shu" was carried out by E. I. Berezkina and
Van Lin (England). R. Khussene (England) spoke about the pro-
blem of changing over from Chinese hieroglyphics to the Latin
alphabet. Several lectures caused lively discussions. By re-
quest of the participants the author gave a report on the re-
sults obtained at the I. All-Union Conference of orientalists
at Tashkent. As an important result achieved at the past con-
ference the establishment of closer contact among the men of
learning of different countries must be mentioned. Further
mention must be made of the good organization and of the
hospitality shown by the   Marburg scientists   and of the

Card 2/3

The Conference of Sinologists at Marburg.   30-12-15/45

spirit of mutual understanding. It was, however, most un-
fortunate that the conference was not attended by delegates
from the Chinese People's Republic. The majority of the dele-
gates apparently recognized the unfortunate character of this
state of affairs, and during the final session the text of a
letter adressed to the   **scientists**   of the Chinese People's
Republic was unanimously approved. In this letter great regret
was expressed that no delegates from Chinese People's Republic
had come, and an invitation was issued for the next regular
conference of young sinologists, which is due to take place at
Venice in 1958. The theme to be discussed will be "The Method
of a Critical Attitude in the Study of Sources".

AVAILABLE: Library of Congress

1. Sinologist—Conference   2. Culture—China

Card 3/3

BEREZKINA, E. I.: Master Phys-Math Sci (diss) -- "The ancient Chinese tract 'Mathematics in Nine Books'". Moscow, 1959. 10 pp (Moscow State U im M. V. Lomonosov), 150 copies (KL, No 16, 1959, 105)

BEREZKINA, E.I.

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(Mathematics, Chinese)

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230 '60.
(Mathematics, Chinese)   (MIRA 14:8)

BEREZKINA, E.I. (Moskva)

From the history of decimal fractions in China. Mat. v shkole
no.3:9-17 My-Je '63.   (MIRA 16:7)

(Mathematics, Chinese)

SKARLYGINA, M.D.; BEREZKINA, G.A.

Results in determining the sum of metals by copper (Cu.Ni.Co)
depending on the method of their extraction from plant ashes.
Vest. LGU 19 no.12:157-161 '64   (MIRA 17:8)

BEREZKINA, G.M.

Cenozoic clay minerals in the central Ob' Valley as a possible
indicator in stratigraphic division of Cenozoic rocks. Nauch.dokl.
vys.shkoly; geol.-nauki no.4:192-197 '58.   (MIRA 12:6)

1. Moskovskiy universitet, geologicheskiy fakul'tet, kafedra gruntove-
deniya.
              (Ob' Valley--Geology, Stratigraphic)

BEREZKINA, G. M., Candidate Geolog-Mineralog Sci (diss) -- "The lithological aspects of the Caemozoic deposits of the Ob' around Tomsk". Moscow, 1959. 19 pp (Moscow Order of Lenin and Order of Labor Red Banner State U im M. V. Lomonosov, Geol Faculty, Chair of Soil Studies and Engineering Geology), 110 copies (KL, No 22, 1959, 110)

BEREZKINA, G.M.

New F-1M filter device for bound soils. Razved. i okh. nedr 27
no.9:54   S '61.   (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i
inzhenernoy geologii.

BEREZKINA, G.M.

Change in the water permeability of coherent soils resulting
from the pressure gradient. Vest. Mosk. un. Ser 4: Geol. 20
no.1:82-83 Ja-F '65.   (MIRA 18:3)

1. Kafedra gruntovedeniya i inzhenernoy geologii Moskovskogo
gosudarstvennogo universiteta.

BEREZKINA, Galina Mikhaylovna; KRYZHANOVSKIY, V.A., red. izd-va;
IYERUSALIMSKAYA, Ye., tekhn. red.

[Instructions on determining the filtration coefficient of
bound soils on the F-1M unit]Instruktsiia po opredeleniiu koef-
fitsienta fil'tratsii sviaznykh gruntov na pribore F-1M. Mo-
skva, Gosgeoltekhizdat, 1962. 18 p.   (MIRA 15:9)
                        (Soil percolation)

KRAVCHENKO, N.A.; SHANINA-VAGINA, V.I.; BEREZINA, G.N.

Nutrient medium for determining the toxigenicity of diphtheria mi-
crobes in experiments in vitro. Lab. delo 10 no.3:170-172 '64.
(MIRA 17:5)
1. Moskovskiy nauchno-issledovatel'skiy institut vaktsin i syvoro-
tok im. I.I.Mechnikova.

KRAVCHENKO, N.A.; SADYKOVA, V.B.; AL'TGAUZEN, V.P.; BEREZKINA, G.N.;
KOSTYUKOVA, N.N.; SUSLOVA, V.S.; BOCHKOVA, V.A.; NEYMARK, F.M.

"Indicator" method for the detection and identification of
diphtheria pathogen cultures, suggested by G.V. Andreeva and
Z.N. Poliakova. Zhur. mikrobiol., epid. i immun. 40 no.3:
131-132 Mr '63.   (MIRA 17:2)

(3C   BERGZKINA, L. F.

A-4

Interrelation between pre-existing fibres in explanted tissue and fibres formed anew in vitro. L. F. Bereskina (Compt. rend. Acad. Sci. U.R.S.S., 1938, 21, 209—211).—Well-formed collagen fibres, explanted into a healthy culture of embryonic connective tissue, are capable of further growth.
W. F. F

ASM-SLA   METALLURGICAL LITERATURE CLASSIFICATION

BEREZKINA, L. F.   Effect on excess of chlorides on carbohydrate metabolism in a tissue grown in vitro. A. Rumyantsev and L. Berezkina. Compt. rend. acad. sci. U. R. S. S. 22, No. 4, 314-317(in English); cf. C. A. 33, 4670².—Bits of heart tissue of an 8-day chicken embryo were grown on films. of blood plasma and salt solns., with and without glucose. Excess of CaCl₂ inhibited growth more than did NaCl or KCl. The latter, however, stimulated sugar consumption the most.   J. J. Willaman

Inst of Evolutionary Morphology imeni A. N. Severtzov
Lab. of Histogenesis

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BEREZKINA, L. F.

From Russian for Dr. C. Grobstein

Izvestiia Akademii Nauk SSSR,
otdel. biol. n. (2): 67-73;
4 figs.; 1943.

On the Possibility of Induction of Cartilage Formation in Vitro
by
L. F. Berezkina
(Institute of Evolutionary Morphology (Dir.: Acad. Member I. I. Shmal'hauzen),
Academy of Sciences of the USSR)

(Article entered editorial office 9-21-1941)

Lab of. Histogenesis, Inst. Evol. Morphology im. A.N Severtso Acad. Sci USSR

BEREZKINA, L. F.

Inst Evolutionary Morphology imeni A. N. Severtsov

ASB-ILA   METALLURGICAL LITERATURE CLASSIFICATION

BEREZKINA, L. F.

"Influence of the Sex Hormone on Regeneration of Bones" p. 148-50

SOURCE: Dok AN, 59, No 1, 1948

    Inst. Evol. Morph im. A. N. Severtsov, Acad. Sci. USSR
    (Lab. of Histogenesis)

BERELKINA, L. F.

FA 1/50T10

USSR/Biology - Amphibia (Contd)   Aug 49

for the necessary 4 months. Includes photographs
of the regenerative stages in four of the five
series. Submitted by Acad K. I. Skryabin
5 Feb 49.

USSR/Biology - Amphibia   Aug 49
        Epithelium, Regeneration

"Morphogenetic Processes During Regeneration of
the Epithelium in Amphibia," L. F. Berezkina,
Inst of Evolutional Morph imeni A. N. Severtsov,
Acad Sci USSR, 3 3/4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6

Performed five series of experiments with the
axolotl and triton in studying the interrela-
tion of epithelial and connective tissues. Am-
putated extremities or removed the outer layers
of skin, and observed the regenerative process

1/50T10

1/50T10

BEREZKINA, L.F.

Changes in striated muscular tissue cultured outside the organism and on the chorioallantois. Trudy Inst.morf.zhiv. no. 11:210-224 '54.   (MIRA 8:2)

(Muscle)

BEREZKINA, L.P. (Moskva)

A five-year-old vegetative hybrid of axolotl and its progeny.
Usp.sovr.biol.40 no.2:239-251 S-O '55.   (MLRA 9:2)
        (HYBRIDIZATION) (PARABIOSIS)

BEREZKINA, L. F.

Radiation-Induced Tumours and Their Role in the Analysis of Malignant Transformation of Tissues

A. N. Studitsky and L. F. Berezkina   3

The well-known phenomenon of carcinogenesis in animals exposed to sublethal doses of radiation was studied, mainly in pure line animals.

Neoplastic transformation of tissues after a radiation-induced trauma was studied in our laboratory in a mixed population of rats. The development of tumours in these rats under normal conditions occurred only very rarely during 1½-2½ yr of observation. Many benign and malignant tumours were obtained during two years work on 300 irradiated rats. In the animals which survived radiation, functions of the haemopoietic tissue including immunological activity of the lymphoid apparatus, were disturbed. Reproductive glands were completely destroyed and their endocrine function arrested. It is very characteristic that the tissues directly damaged by radiation (intestinal epithelium, haemopoietic tissue, gonads) do not develop tumours. Mammary glands become malignant most often; second in frequency of tumour formation are the salivary glands; third, the osseous tissue. A hypothesis of the mechanism of tumour development is put forward. Radiation damage enhances processes of abnormal protein synthesis going on in any normal organ. Regulating mechanisms stimulating normal protein synthesis (organs of endocrine regulation including gonads, those regulating salivary glands, and the development of the osseous tissue), and tissues concerned with immune responses are simultaneously disturbed. Neoplastic development starts as a result of the action of these factors.

Laboratory of Histology, Institute of Animal Morphology, U.S.S.R. Academy of Sciences, Moscow

49

report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

BEREZKINA, L.F.

    Change of mitochondria in muscle tissue during regeneration.
    Tsitologiia 4 no.6:661-665 N-D'62   (MIRA 17:3)

    1. Laboratoriya gistologii Instituta morfologii zhivotnykh
    AN SSSR, Moskva.

SOV/24-58-5-23/31

AUTHORS: Berezkina, L. G. and Chizhikov, D. M. (Moscow)

TITLE: Kinetics of Reduction of Lead Silicates by Means of Carbon Monoxide (Kinetika vosstanovleniya silikatov svintsa okis'yu ugleroda)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 5, pp 124-127 (USSR)

ABSTRACT: The author studied the kinetics of reduction of lead silicates at various pressures of the carbon monoxide (10 to 400 mm Hg col) in the temperature range from the beginning of an appreciable reduction up to the temperature of fusion of silicates ($745°C$ for $2 PbO \cdot SiO_2$, $765°C$ for $PbO \cdot SiO_2$). The experiments were carried out in vacuum equipment with continuous circulation of carbon monoxide and freezing out of the gaseous reaction products CO_2 by means of liquid nitrogen; the progress of the reactions was judged from the loss of weight of the initial specimen during continuous weighing on electro-magnetic scales by means of the compensation method, whereby the recording was effected automatically. The experimental data obtained for temperatures of
Card 1/3 700, 650, 600 and 550°C in CO pressures of 400, 200, 50

SOV/24-58-5-23/31

Kinetics of Reduction of Lead Silicates by Means of Carbon
Monoxide

25 and 10 mm Hg are graphed in Figs 1-6. It was found
that the reduction of lead silicates takes place at
relatively low speeds and incompletely. In the case
of a 70 to 75% reduction of the ortho-silicate and a
25 to 35% reduction of the meta-silicate, a considerable
drop is observed in the speed of the process,which is
caused apparently by the formation of a layer of the
solid reaction product SiO_2. An increase in temperature
brings about a considerable acceleration of the reduction
of the silicates, whereby the dependence of the reaction
speed on the temperature complies with the Arrenius
equation. The influence of the pressure on the speed of
the process is described by an equation of the type of
the adsorption isotherm. It is concluded that in
reduction heats a considerable part of the lead in the
agglomerate, which is combined into silicates, does not
become reduced in the solid state and, therefore,

Card 2/3

SOV/24-58-5-23/31

Kinetics of Reduction of Lead Silicates by Means of Carbon Monoxide

reduction of the lead in the molten state assumes considerable importance.
There are 6 figures and 11 references, 9 of which are Soviet, 2 English.

SUBMITTED: February 7, 1958

Card 3/3

BEREZKINA   L.G.

BEREZKINA, L.G.

CHIZHIKOV, D.M.; BEREZHKINA, L.O.

Kinetika vosstanovleniya zakisei i zakisa okisyya ugleroda.

report submitted for the 5th Physical Chemical Conference on Steel Production.

Moscow _ 30 Jun 1960

BEREZKINA, L. G., Candidate Tech Sci (diss) -- "The kinetics of reducing sili-

cates of lead and zinc with carbon monoxide". Moscow, 1959. 23 pp (Acad Sci

USSR, Inst of Metallurgy im A. A. Baykov), 150 copies (KL, No 24, 1959, 134)

SOV/180-59-2-19/34

AUTHORS: Berezkina, L.G., and Chizhikov, D.M.   (Moscow)

TITLE: Kinetics of the Reduction of Lead from a Melt of its
          Silicates (Kinetika vosstanovleniya svintsa iz rasplava
          yego silikatov)

ABSTRACT: The reduction of solid lead silicates by carbon monoxide
          is slow and incomplete (Ref 1), therefore the kinetics of
          lead-silicates melt reduction are important. To avoid
          difficulties normally associated with the determination
          of the course of reduction reactions in the $PbO-SiO_2$
          system the authors have used a radioactive screening
          method which they developed together with A.M. Yakobson.
          The method depends on the weakening of a horizontal beam
          of gamma radiation passing through the melt as a result
          of the gradual accumulation of lead at the bottom of the
          crucible. The source consisted of Co^{60} with a total
          activity of about 120 millicurie in a lead container.
          The beam was collimated, passed through the melt via
Card 1/3 special channels in the vertical furnace, and its
          intensity was determined with a scintillation counter on

SOV/180-59-2-19/34

Kinetics of the Reduction of Lead from a Melt of its Silicates

the other side of the furnace. The furnace and crucible
could be moved vertically. The apparatus is shown in
Fig 1. Voltage for feeding the type FEU-19M photo-
electric multiplier was provided from a type "Orekh"
rectifier, the current being measured with a type M91
microammeter. The reading of the recorder was found to
be linearly related to the quantity of lead liberated.
The degree of reduction vs time relations for $4PbO.SiO_2$
were obtained at 800, 900, 1000 and 1100 ^oC and for
$2PbO.SiO_2$ at 900, 1000 and 1100 ^oC. The curves obtained
are shown in Figs 2 and 3, respectively. Chemical
analysis and visual examination of reduced silicates
revealed that a concentration gradient existed up the
melt, suggesting that diffusion was the rate-controlling
factor. This was indirectly confirmed by the
applicability to the process of a solution of Fick's
diffusion equation for a semi-infinite rod (Ref 2).
Nominal values of the diffusion coefficients were
calculated: 1.0×10^{-4}, 5.6×10^{-5}, 3.1×10^{-5},

Card 2/3 7.1×10^{-6} cm^2/sec for 1100, 1000, 900 and 800 ^oC,

SOV/180-59-2-19/34

Kinetics of the Reduction of Lead from a Melt of its Silicates

respectively for $4PbO.SiO_2$ and 1.9 X 10^{-5}, 7.8 X 10^{-6} and 3.5 X 10^{-6} cm^2/sec for 1100, 1000 and 900 ^oC, respectively, for $2PbO.SiO_2$.

Card 3/3   There are 4 figures, 1 table and 6 references, 5 of which are Soviet and 1 English.

ASSOCIATION: Institut Metallurgii AN SSSR (Institute of Metallurgy AS USSR)

SUBMITTED: November 29, 1958

18(7)
AUTHORS: Berezkina, L. G., Chizhikov, D. M., Yakobson, A. M.

SOV/32-25-9-16/53

TITLE: Application of Gamma Radiation in the Investigation of the Kinetics of the Reduction of Smeltings

ABSTRACT: A method for the continuous control of the metal reduction from meltings was developed. It is based on a weakening of the intensity of the gamma radiation travelling through the smeltings due to one ray of the gamma rays being weakened by a layer of the separating metal. The method was used to investigate the reduction kinetics of lead from smeltings of lead silicates (I) with the following composition: $4PbO \cdot SiO_2$ and $2PbO \cdot SiO_2$. On the separation of Pb from (I) a change in the density of the medium by approximately 30% results, the intensity of the above mentioned penetrating ray being changed by 40 - 50%. Measurements were carried out on a unit (Fig 1) using Co^{60} of approximately 120 Millicurie, a photoelectron multiplier FEU-19M, a stabilized "Orekh" type rectifier and a micro-ammeter M-91. The apparatus was calibrated by the insertion of weighed pieces of lead into the smelting. The sensitiveness of the apparatus with respect to

Card 1/2

Application of Gamma Radiation in the Investigation of SOV/32-25-9-16/53
the Kinetics of the Reduction of Smeltings

a displacement of the silicate - lead limit in the smelting
amounted to ± 0.2 mm with the depth of the lead layer changing
from 5 to 6 mm. Diagrams are given on the influence of time and
temperature on the reduction degree of lead from the smelting
$4PbO \cdot SiO_2$ (Fig 3). By evaluating the kinetic data obtained the
diffusion coefficients in the smelting were established. Some
limits are given which must be taken into consideration when
using the method described. There are 3 figures, 1 table, and
1 Soviet reference.

ASSOCIATION: Institut metallurgii Akademii nauk SSSR im. A.A. Baykova
(Institute of Metallurgy, Academy of Sciences, USSR, imeni
A. A. Baykov)

Card 2/2

5(4)

AUTHORS: Chizhikov, D. M., Corresponding Member,   SOV/20-124-5-39/62
             AS USSR, Berezkina, L. G.

TITLE: The Influence of Additions of Compounds of Alkali Metals Upon
             the Kinetics of the Reduction of Zinc Silicate by Carbon
             Monoxide (Vliyaniye dobavok soyedineniy shchelochnykh metallov
             na kinetiku vosstanovleniya silikata tsinka okis'yu ugleroda)

ABSTRACT: The present paper deals with the kinetics of the reduction of
             zinc silicate $2ZnO \cdot SiO_2$ by carbon monoxide and with the influ-
             ence exercised by additions of potassium carbonate, sodium
             carbonate, and lithium carbonate as well as by sodium chloride
             and calcium chloride upon this process. The zinc silicate is
             produced by the sintering of purified quartz powder with zinc
             oxide at temperatures of $1,380-1,400^\circ$. The additions are intro-
             duced by impregnation from aqueous solutions in quantities of
             7.5 mol% with respect to the zinc silicate. This corresponds
             to a content of 2-5 % by weight of additions to the mixture.
             Circulation was effected in a vacuum device with continuous

Card 1/4

The Influence of Additions of Compounds of Alkali   SOV/20-124-5-39/62
Metals Upon the Kinetics of the Reduction of Zinc Silicate by Carbon
Monoxide

circulation of the carbon monoxide and by freezing-out of the
reaction product CO_2 by liquid oxygen. A diagram shows the
influence exercised by temperature on the kinetics of the re-
duction of zinc silicate by carbon monoxide. Reduction begins
at 1,000° at the noticeable rate of 3 % per hour, and a further
increase of temperature accelerates reduction considerably.
Within the investigated degrees of reduction the process de-
velops practically with constant velocity and the kinetics of
the reaction is described by the linear equation $a = kt$. The
apparent activation energy of the process is 31 kcal/mol. The
pressure of carbon monoxide exercises no influence upon the
degree of reduction of the zinc silicate within the limits of
50-400 torr. A further diagram gives data on the reduction of
$2ZnO.SiO_2$ with an addition of potassium carbonate. The follow-
ing explanation of the mechanism and the causes of the spe-
cific effect produced by individual additions may be given:
During reduction the additions may undergo several transfor-
mations, and at experimental temperatures the carbonates are

Card 2/4

The Influence of Additions of Compounds of Alkali   SOV/20-124-5-39/62
Metals Upon the Kinetics of the Reduction of Zinc Silicate by Carbon
Monoxide

dissociated. The oxides of the alkali metals are rather vola-
tile and may be adsorbed on the surface of the silicate. In
the case of adsorption of the oxides on the reacting surface
lattice defects may form, and active reaction centers may be
produced. By an increase of the activity of the surface also
the positive influence exercised by the pressure increase
upon the reduction of the silicate in the presence of potassium
carbonate is explained. By the electronic interaction of the
adsorbed compounds with the ions of the surface layer of the
lattice the surface mobility (migration) of ions increases,
and therby the crystallochemical transformations occurring in
the course of reduction are facilitated. The accelerating
effect of the carbonate additions decreases in the order
potassium-sodium-lithium. The characteristic features of the
additions may be due to the difference in the particular
features of interactions between the admixtures and the
silicate lattice due to electrons. The results obtained by
the present paper indicate a considerable acceleration of

Card 3/4   indirect reduction by the addition of small quantities of alkali

The Influence of Additions of Compounds of Alkali   SOV/20-124-5-39/62
Metals Upon the Kinetics of the Reduction of Zinc Silicate by Carbon
Monoxide

metal compounds, especially of potassium and soda. There are
3 figures and 5 Soviet references.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR
(Institute of Metallurgy imeni A. A. Baykov of the Academy of .
Sciences, USSR)

SUBMITTED: November 5, 1958

Card 4/4

5(4)
AUTHORS: Berezkina, L. G., Yakobson, A. M.   S/032/60/026/02/019/057
                                                    B010/B009

TITLE: Determination of the Temperature Gradient of the Density
              From the Absorption of Permeating Radiation

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol 26, Nr 2, pp 171 - 172
              (USSR)

ABSTRACT: A contactless method for the determination of the temperature
              gradient of the density from the weakening of the intensity of
              gamma rays permeating the substance is described. This
              weakening is expressed by equation $I = I_0 e^{-\mu \varrho x}$ (1) (I_0 = radia-
              tion intensity without absorption, μ = mass coefficient of
              absorption, ϱ = density of the medium, x = thickness of
              absorptive layer), according to which the ratio of radiation
              intensities with a temperature change of the substance from
              t_0 to t reads $\ln \dfrac{I_t}{I_{t_0}} = -\mu(\varrho x - \varrho_0 x_0)$ (2) ($\varrho, \varrho_0, x, x_0$ = densi-
              ties of the medium and thicknesses of the absorptive layer

Card 1/2

Determination of the Temperature Gradient of the   S/032/60/026/02/019/057
Density From the Absorption of Permeating   B010/B009
Radiation

at t and t_o, respectively). The dependence of $\ln \dfrac{I_t}{I_{t_o}}$ on Δt

can be represented with sufficient accuracy by a straight line
in the case of tin and lead silicate melts (Fig). The measure-
ments were carried out by means of an apparatus previously
described (Ref 1). Zirconium crucibles were used. The values
obtained are in satisfactory agreement with data obtained by
M. P. Slavinskiy (Ref 2) as well as V. A. Zyazev and O.A. Yesin
(Ref 3). A fast cooling of the $2PbO \cdot SiO_2$ melt results in
vitrification. The glass shows a greater density than the
liquid phase. If the cooling takes place slowly, crystalline
lead orthosilicate forms. In this case the density of the
solid phase is lower than that of the liquid phase and depends
on the rate of crystallization. This is apparently due to the
formation of small cavities. There are 1 figure and 3 Soviet
references.

ASSOCIATION: Institut metallurgii Akademii nauk SSSR (Institute of Metallurgy
Card 2/2   of the Academy of Sciences of the USSR)